

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

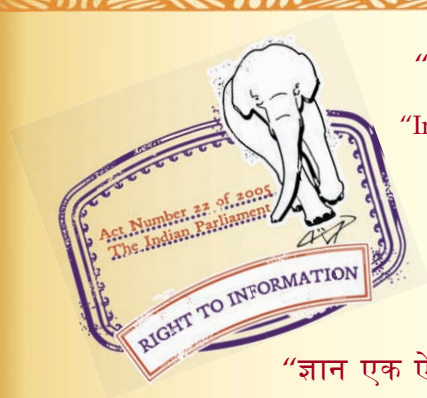
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10874 (1983): Felsite Grinding Media and Liner Stones  
[MED 17: Chemical Engineering Plants and Related Equipment]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard

# SPECIFICATION FOR FELSITE GRINDING MEDIA AND LINER STONES

**1. Scope** — This standard covers composition, dimensions and physical characteristics of felsite grinding media and ball mill liner stones used as grinding media.

**2. Applications** — The felsite grinding media and liner stones are used as high density grinding media to grind quartz, feldspar, lime stone, shells, silicon carbide, zircon flours, etc.

**3. Composition** — The chemical composition of the felsite grinding media shall be as given in Table 1.

## 4. Dimensions

**4.1 Grinding Media Cylinders** — The dimensions of the grinding media cylinders shall be as given in Table 2.

## 4.2 Liner Stones

**4.2.1 Plain bricks** — For plain bricks, the dimensions shall be as follows:

$20 \times 13 \times 5$  cm  
 $20 \times 13 \times 7.5$  cm  
 $30 \times 20 \times 10$  cm  
 $30 \times 20 \times 12.5$  cm

**4.2.2 Tapered bricks** — For tapered bricks, the dimensions shall be as follows:

$10 \times 5 \times 5/4$  cm  
 $10 \times 10 \times 10/9$  cm  
 $15 \times 10 \times 10/9$  cm  
 $20 \times 12.5 \times 12.5/11$  cm  
 $23 \times 14 \times 14/12$  cm  
 $29 \times 14 \times 14/12$  cm

**5. Physical Characteristics** — The felsite grinding media shall have the following properties:

Specific gravity 2, *Min*

Hardness 7 to 8 (Mohs' scale)

**TABLE 1 CHEMICAL COMPOSITION OF FELSITE GRINDING MEDIA**  
( Clause 3 )

Constituent	Percent
Silica ( $\text{SiO}_2$ )	70 to 80
Alumina ( $\text{Al}_2\text{O}_3$ )	15 to 17
Ferric oxide ( $\text{Fe}_2\text{O}_3$ )	0.92
Titanium dioxide ( $\text{TiO}_2$ )	0.1
Calcium oxide ( $\text{CaO}$ )	2.2
Magnesium oxide ( $\text{MgO}$ )	1.18
Loss on ignition	1.10
Alkalis, etc (by difference)	6.66

TABLE 2 DIMENSIONS OF GRINDING MEDIA CYLINDERS  
( Clause 4.1 )

Diameter mm	Height mm
30 to 35	30 to 35
40 to 45	40 to 45
50 to 55	50 to 55
60 to 65	60 to 65
70 to 75	70 to 75
75 to 90	75 to 90
90 to 100	90 to 100
100 to 130	100 to 130
130 to 150	130 to 150

#### EXPLANATORY NOTE

This standard gives guidance on the selection of the grinding media for a particular application depending on the hardness of the products to be crushed.